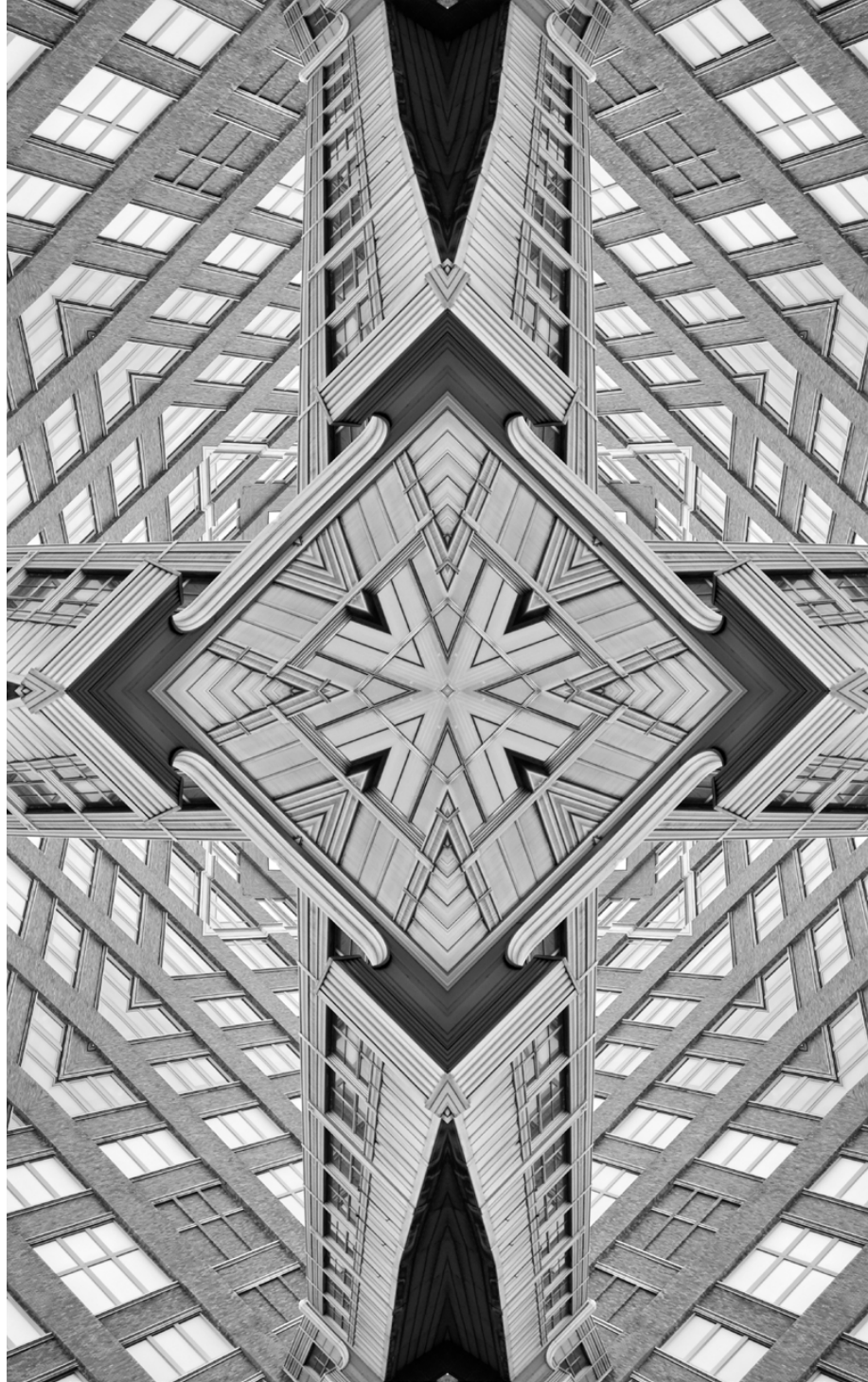


Issue

Brief

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Real Politics, Imagined Futures: The Influence of Geopolitics and Technological Development on Science Fiction Since the 20th Century

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Abstract

This brief examines the reciprocal relationship between science fiction and real-world technological, geopolitical, and policy developments throughout the 20th century and into the 21st. Beginning in the 1940s, the analysis explores how the genre has evolved amid historical events such as the World Wars and the Cold War, and the rise of digital technology. The brief gives particular attention to the role of science fiction during periods of crucial technological and geopolitical shifts, such as the atomic age, the space race, and the digital revolution, highlighting how these narratives have both mirrored, and been influenced, by technological innovation and geopolitical strategies. The brief also delves into the concept of “useful fiction,” particularly within the defence and policy sectors, to illustrate how science fiction is strategically employed to model future scenarios and inform policy directions.

In the realm of science fiction, the interplay between imagination and reality is a dance of influence and inspiration. The language of science fiction acts as a conceptual bridge between the sciences and humanities and also between technology experts and lay people. Science fiction narratives have also been described as being “intertext”—i.e., “having the tendency of crossing back and forth between science fiction texts and our own world.”¹ The genre has thus been used by scholars to convey the complexities of scientific and technological innovation through science fictional analogies and metaphors,² whose flexibility allows it to affect the worldview of individuals by dramatising the socio-political significance of present and future science and technologies.³ These attributes allow science fiction narratives to proliferate the gestalt as “a diagnosis, a warning, a call to understanding and action, and—most importantly—a mapping of possible alternatives.”⁴ This brief explores the inverse relationship: the ways in which policy, geopolitics, and technological development have influenced and continue to influence the narratives and themes of science fiction.

Scholars have argued that science fiction has been the “cultural wallpaper” of humanity since the beginning of recorded history.⁵ It is not possible, however, to conduct an exhaustive exploration of all the globally distributed science fiction traditions that have emerged over previous centuries. The focus of this brief will be on selected works written or translated into English, and authors who have received international acclaim. A comprehensive account of pre-modern science fiction is also beyond the scope of this brief. It takes as its starting point the 1940s, when stories of technological futures were numerous and popular enough to be associated with a single identifiable genre. The journey through the evolution of this genre, from the first half of the 20th century to the modern era, will uncover how science fiction has not only reflected but also responded to the technological breakthroughs and geopolitical landscapes of its time.

A distinguishing feature of the science fiction genre is its contribution to the development of technology. Since the late 19th century, the genre has contributed to the creation of submarine technology, space launches,⁶ flip phones, and innovative software.⁷ Yet, the relationship between science fiction and science fact is not unilinear but recursive. For instance, the period between 1930 and 1950 was a transformative era in science fiction, heavily influenced by the geopolitical and political trends of the time. This was a time marked by the Great Depression, the Second World War, and the beginnings of the Cold War. These global events influenced the themes and narratives in science fiction literature, as seen in notable works from the period.⁸

Introduction

From the impact of global conflicts and the space race to the digital revolution, science fictional narratives have been influenced by geopolitical dynamics. Since science fiction is a genre that highlights cultural imaginings of humanity's technological future, the near-term or longitudinal speculative extrapolations of its narratives are intricately linked to the policy decisions that frame the social, cultural, economic and political realities of its readers. The following section aims to shed light on how science fiction has engaged with some of the most crucial geopolitical trends of the 20th century.

“Science fiction has been called the “cultural wallpaper” of humanity since the beginning of recorded history.”

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The Atomic Age and the Post-War Period

During the 1940s, the science fiction genre experienced a shift towards stories that addressed the consequences of nuclear technology and the moral complexities of scientific progress. This change came in the aftermath of the atomic bombings in Hiroshima and Nagasaki, which sparked a wave of reflection on the potential destructiveness as well as the necessity of nuclear power and its implications for global politics.⁹ Robert A. Heinlein’s “Solution Unsatisfactory”, published in 1941, stands out for its prescient depiction of nuclear arms development challenges, including the nuclear arms race and the concept of mutually assured destruction, even though it did not directly discuss fission bombs.¹⁰ The story explored the use of radioactive dust in warfare and the difficulties in managing such a formidable force. John W. Campbell, meanwhile, contributed to the genre’s engagement with atomic themes through his stories and editorials in “Astounding Science Fiction” magazine, encouraging authors to contemplate the ramifications of nuclear energy.¹¹ Works like Heinlein’s “Blowups Happen”, about nuclear power plant dangers, and Lester del Rey’s “Nerves”, focusing on a nuclear facility accident, exemplified the period’s focus on the risks associated with nuclear technology.¹²

During this period, perhaps the most radical cultural impact of nuclear weaponry was felt in Japan. The postwar period is marked by the creation and proliferation of apocalyptic science fiction narratives and characters like Astro Boy and Godzilla, which went on to garner national and international popularity. “Astro Boy”, a comic series written by Osamu Tezuka in 1951, had for its protagonist, Atom—an atomic-powered robot created in the image of a human child. Using his atomic powers for benevolent purposes, Atom embodied “the latent utopian possibilities of the atomic age—nuclear power used to save rather than destroy.”¹³ Awkwardly learning to use his powers, Atom was perceived as representing “humanity itself, learning to use this new power to beneficial purpose.”¹⁴ The series was published at a time the US was trying to change the rhetoric surrounding nuclear weapons research in Japan.

For its part, *Godzilla* represented the destructive power of nuclear technology, with Godzilla being a lizard that mutated due to nuclear radiation and attacking with nuclear breath; Godzilla “functions not merely as a metaphor for the atomic bombs but rather its physical manifestation.”¹⁵ Following the atomic bombings of Hiroshima and Nagasaki and the subsequent surrender of

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the Japanese forces, the US occupying forces implemented a strict censorship regime to stifle discussions surrounding the bombings.¹⁶ Godzilla was released just as the grip of censorship was loosening. The film acted as direct reference to nuclear devastation, even though it was ostensibly described as Japan's response to Western fictional characters like King Kong.

Geopolitical competition and conflicts as allegories

In the 20th century, the strongest impact of political developments on the sci-fi genre was arguably felt in Indian works. Originating in the 19th century, Indian sci-fi stories generally consisted of adventure tales inspired by Western writings of the same genre, like those of Jules Verne and H.G. Wells—these were revolutionary future histories and stories that employed certain scientific and technological motifs.¹⁷ The political character of Indian science fiction stories continued to strengthen into and throughout the 20th century. An example is “Baisvee Sadi” (1924) by Rahul Sankrityayan. The book was written as a response to the “endemic degeneration of social relationships within the colonial structure” as it depicted a 22nd-century independent India devoid of caste and communal tensions and governed through rationally developed socio-economic mechanisms.¹⁸ In the post-Independence period, works like “Ghanada” (1945-88) by Premendra Mitra and “Professor Shanku” (1961-72) by Satyajit Ray represented a strong inclination of indigenous authors to subvert the cultural and ideological hegemony of the West. They questioned the established primacy of Western epistemological traditions, inverting global power dynamics in their stories and “presenting a Hindu epistemic tradition as a viable alternative to science conceived as a European imperial project.”¹⁹

The technological revolution that accompanied the Second World War gave birth to a host of inventions, including atomic bombs and television, that influenced the themes presented in science fiction. The accelerated tempo of scientific development in the postwar period made the genre seem not only prescient but uniquely relevant, since one of the genre's key themes has always been the inescapable reality of techno-social change.²⁰ In the West, the escalation of the US space program following the 1957 launch of the Soviet satellite Sputnik only increased science fiction's crossover appeal, priming the market for the bestsellers that would emerge in the 1960s.²¹

Furthermore, the devastating backdrop of the World Wars caused a surge in utopian and dystopian science fiction themes. Literary scholar Adam Roberts has noted the impact of geopolitics on the thematic features of postwar science fiction in Western economies like the US and UK. In the US, Heinlein's postwar works highlighted the tendency to “advocate the perpetuation and growth

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of the military-industrial complex.”²² For instance, his 1959 novel “Starship Troopers”—later adopted as a film in 1997—is considered “one of the most hawkish SF books ever written,” with its valorisation of military existence and the portrayal of extraterrestrial enemies on whom human reason is lost.²³ Even though the story portrays its overt militarism through a satirical lens in many instances, critics have described it as a “study in ideological uncertainty.”²⁴ The story is about an existential conflict between humanity and a race of highly evolved hive-minded insects called Arachnids. Heinlein chose insects as antagonists because “they are an apt metaphor for communists” whom he regarded as “devoid of compassion, creativity, spirituality and intellect.”²⁵ While etching out the narrative context of the conflict, Heinlein writes “extended passages about the benefits of a social order organized by militaristic principles without a trace of irony.”²⁶ This controversial ambiguity, which only raised the popularity of the book, made the story the “ancestral text of US SF militarism, that inflected and to an important degree shaped the implicit and explicit debate” over the military-industrial complex.²⁷

Whereas postwar American science fiction represented a “by and large, bullish, can-do and outward looking” attitude, UK science fiction represented introverted, dystopian, and pessimistic undertones.²⁸ Roberts ascribes this divergence to the geopolitical realities of that time, with the US in the 1950s and 1960s moving towards becoming a global hegemonic power as the British empire was being strategically condensed into a “more proportionate position as a small island on the margins of Europe.”²⁹ This introverted and pessimistic attitude was epitomised in the highly acclaimed novel “Nineteen Eighty-Four” (1949) by George Orwell which was based on the fascistic and totalitarian regimes of the 1930s and 1940s.

During the Cold War years, the tone of science fiction narratives acquired overt ideological flavour that reflected the geopolitical tensions between the US and Allied forces against the Soviet Union and its satellites. This shift was not surprising, given the continuous entanglement of the US Department of Defense (DoD) and the entertainment industry. This dynamic started from the formation of the Committee on Public Information’s Division of Films during the First World War. In the Second World War, the US Office of War Information established the Bureau of Motion Pictures, and during the Cold War, the war-propaganda efforts intensified with the creation of DoD’s Motion Picture Production Office.³⁰

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The continuous political investment in creating a “military-entertainment complex” (or “militainment”) has been used to influence the public “unaware of the character and origin of the messages that are made available to it.”³¹ Indications of such subterfuge were present in famous sci-fi stories of the time. For example, as political scholar Jason Dittmer notes, the dialectical identitarianism between the US and the Soviet Union during the Cold War is apparent in franchises like *Star Trek* and *Star Wars*.³² The series implemented an “ideological pedagogy” by drawing strong semblances between a virtuous and moral ‘Federation’ and the US along with its NATO allies on one hand, while implicating the USSR in the fundamentalist, aggressive and militaristic characterisation of the evil ‘Empire’.³³

The nexus between science fiction and geopolitics continued to be informed by the ideological framing of the Western political imagination in the early 21st century. A crucial node in this nexus was the intensification of the rhetoric around the global ‘War on Terror’ following the 11 September 2001 terrorist attacks in the US that often complemented and substituted imaginative speculation for observational analysis.³⁴ For instance, within a month of the attacks it was reported that US government intelligence specialists had been “secretly soliciting terrorist scenarios from top Hollywood filmmakers and writers” to brainstorm about US security vulnerabilities and possible solutions.³⁵

Indeed, the ideational relationship between Hollywood science fiction and the American security apparatus can be gleaned from various titles: *Battlestar Galactica* depicted an “ambiguous and problematic vision of democracy’s battle with fundamentalism” based on diffused fears stemming from the 9/11 attacks; Steven Spielberg’s *War of the Worlds* and Danny Boyle’s *28 Days Later* allegorised the US invasion of Iraq; and Roland Emmerich’s *Independence Day* epitomised the alien-terrorist motif.³⁶

The 1980s and the digital revolution

Beginning in the 1970s, certain shifts began to take place in the global economy that were reflected in popular sci-fi narratives. The first significant development was the ubiquitous availability of personal computers in Western households and the creation of the digital infrastructure encompassing the global economy today.³⁷ The second was the growth of commodity culture with all the trappings of unregulated capitalism. The new cultural shift took place as “the capitalist system reached the end of its postwar profit curve and began the process of reconfiguring itself and commodifying everything in sight.”³⁸

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The most popular science fiction narratives produced in this era were within the sub-genre known as ‘cyberpunk’ and reflected this movement towards ever-increasing digitalisation, globalisation, and the creation of transnational socio-economic networks. Classic examples of cyberpunk stories are William Gibson’s “Neuromancer” (1984), Neal Stephenson’s “Snow Crash” (1992), and film franchises like *The Terminator*, *Blade Runner* and *The Matrix*. In contrast to the 1930s-1950s and postwar science fiction stories that represented conflicts between the so-called free-world and totalitarian regimes, cyberpunk stories had transnational corporate power as its antagonistic force. Reflecting the technological advancements of the 1980s, the stories often featured advanced computers, cybernetic enhancements, artificial intelligence, and virtual reality technologies.

Western cyberpunk stories were also infatuated with East Asian, specifically Japanese, motifs, urban architecture, and aesthetics. The Japanese cityscape was presented through “an international lens of anxiety and desire associating Japan and its technology with global futurity.”³⁹ The flames of anxiety were fanned by the increasing economic dominance of “amorphous Japanese collectives” and “megacorporations” like Sony, Matsuhita and Mitsubishi in the American economy. Such developments increased Western fascination with the “Asian or Oriental Other.”⁴⁰

It is not difficult to see the influence of the geopolitical landscape, developments in the global economy and technological innovation on the evolution of science fiction beginning in the 20th century. This influence only intensified through the past century as “the gradient of the graph marking technological and cultural change against time went nearly vertical.”⁴¹ The beginning of the 20th century was dominated by colonial empires and littered with revolutionary movements around the globe. The cultural imaginary of the West, as allegorised in sci-fi stories, saw the world divided between rational civilised societies and primitive colonised peoples. The stories valorised material technology, engineering, and “a secularised logic of mobilised, systematised materiality” as the anvil on which the future of an enlightened humanity—led by the West—will be forged.⁴²

As the century dragged on there was a growing apprehension in literary culture about seemingly perpetual global conflicts with the World Wars and the subsequent Cold War years. In this context, from the 1930s till the period of the Cold War, the science fiction genre with its *axis mundi* situated in the US and UK became overtly ideological. While UK science fiction saw a pessimistic

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turn in its cultural imaginary, its American counterpart employed a “distorted form of cognitive mapping” and presented “overtly ideological representations of external threats and alien invasions” against the “hometown reality of the United States surrounded by the implacable menace of world communism” and “Third World poverty.”⁴³

From the 1980s in the West, and in the 1990s in developing countries, the growth of global finance capitalism and transnational corporations—along with the rapid expansion of the digital infrastructure, personal computing devices, and the internet—became the primary influence on the genre. The birth and popularity of cyberpunk is emblematic of this shift. Although digital technology has improved at an accelerating pace since the 1980s, the conceptual products and services being developed today are based on the theoretical foundations laid in the fields of computer science and engineering before the turn of the century. Cyberpunk thus arguably remains the most popular form of science fiction today as its concepts and motifs are turning into “an outright representation of the present” experienced by people in societies that are seeing an increasing percolation of digital technology and infrastructure.⁴⁴

The enduring relevance of the genre in today’s cultural imaginary is visible in ongoing policy and popular debates and discourses around AI sentience,⁴⁵ the increasing capabilities of generative AI,⁴⁶ virtual reality products and services, the existential risk that AI poses to humanity,⁴⁷ and autonomous AI agents that will potentially participate in the global economy in the near future.⁴⁸

The following section explores the types of socio-cultural themes and motifs favoured today.

Guiding Cultural Imagination and Future Visions

The discursive landscape around the implications of technology has changed since the previous century. The prominent concerns presented in a substantial portion of 20th-century science fiction reflected the geopolitical backdrop of a Western global order through narratives of pioneering technological advancement, cosmic expansion, and symbolic battles against communist threats. Since the dawn of the 21st century, the relevance and implications of technology has seen a shift from the geopolitical to the socio-economic and political.

In focus are questions about how digital infrastructure and digital information—now seen as more precious to the world economy than oil—are controlled.⁴⁹ To address the issue of control, the field of political theory has seen the emergence of concepts like “surveillance capitalism” and “platform capitalism.”⁵⁰ The concepts share a similarity in that, based on modern data collection practices of governments and tech companies and the rise of digital platforms, they characterise the global techno-capitalist ecosystem as using “human experience as free raw material for translation into behavioural data.”⁵¹ Control over digital data has become a contentious issue that has seen several engagements between individuals, civil society actors, governments, and the tech sector over the past decade. The contention is a consequence of anxieties regarding unregulated data collection en masse and their implementation in opaque machine learning (ML) algorithms and AI tools.

On a socio-economic level, these anxieties have surfaced over the past year in relation to the proliferation of generative AI tools that use human-generated data from the internet for training. The expanding capabilities of generative AI have quickly revealed the vulnerability of labour markets in various sectors. AI has even started disrupting creative industries, an arena that has conventionally been seen as the exclusive domain of human intelligence.⁵² The tensions surrounding control over creativity are evident in the various ongoing lawsuits between creative professionals, unions, and tech companies.⁵³

The overlap and subsequent global diffusion of real-world socio-political anxieties through science fiction stories reveal their intertextual nature (of allowing ideas to migrate from fiction to the real world) mentioned at the outset. This feature of the genre is now being utilised by institutions to guide and inform social expectations of the future. Whereas development of platforms like rocketry, nuclear bombs, and computers coupled with key geopolitical events influenced the themes utilised by sci-fi authors in the previous century, recent years have seen deliberate efforts by policymakers and strategists to use science fiction as a tool to prepare for emerging geopolitical shifts. Such narratives are specifically applied in the field of ‘strategic foresight’ by defence communities and are focused on investigating unprecedented risk scenarios rather than predicting the future of conflict.⁵⁴

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‘Useful Fiction’ in Defence Planning

Certain countries have begun employing science fiction-based scenarios to gain strategic foresight. By incorporating ‘useful fiction’ into defence education and planning, this experimental approach aims to raise awareness about the potential of science fiction to inform and enhance military strategy and planning. Although most of these initiatives are still in the theoretical phase and have yet to be formally integrated into operational defence planning, they represent a shift towards recognising the significance of creative thinking to address unprecedented challenges.

United Kingdom: In 2023, the UK Ministry of Defence (MoD) and the Defence Science and Technology Laboratory (Dstl) published an anthology, “Stories From Tomorrow: Exploring New Technology Through Useful Fiction.” The objective is to “envision the future operating environment, highlight disruptive trends from new technologies and geopolitical shifts, and spur conversation and debate about the future of professional military education.”^{a,55} The anthology was written by American writers Peter W. Singer and August Cole who have also founded Useful Fiction, a think tank that uses science fictional scenarios to provide strategic foresight to government agencies in countries like the US, Canada, France, and the UK. This transnational effort indicates a growing trend in the West of developing innovative strategic thinking in military contexts.

France: In France, the Red Team Defence programme was commissioned in 2019 by the French Ministry of the Armed Forces (MoAF). The programme included independent science fiction authors, screenwriters and illustrators along with scientists from the University of Paris and military experts. The objective of the ongoing programme is to respond to the French MoAF’s research in scenario planning and need for strategic anticipation of novel

a The technologies presented in the stories include quantum computing, large data models, cyberpsychology (the creation of psychological profiles using digital footprints of individuals), autonomous weaponry and genetic enhancement technologies for military personnel. This approach aims to create narrativised “synthetic experience” for readers and contextualise evolving strategic and security trends to promote relevant action and “debunk conventional wisdom.” See: <https://www.gov.uk/government/publications/stories-from-the-future-exploring-new-technology-through-useful-fiction/stories-from-tomorrow-exploring-new-technology-through-useful-fiction>.

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geopolitical and technology-enabled threats.^{b,56} The French government and military's interest in the program is hinted at by an official from the French Armed Forces' Agency of Innovation and Defense (AID) who stated that then President Emmanuel Macron asked for a direct and secure line to the Red Team. The program has already yielded results.⁵⁷ The Red Team was reportedly invited to join discussions on the France's next-gen aircraft-carrier set to replace the Charles de Gaulle. The team conceptualised "possible attacks by pirates, which had not been anticipated by the engineers and industry experts." Consequently, modifications were made to the security provisions of the aircraft-carrier.⁵⁸ The initiative is stated to have "opened the chakras" of the French military hierarchy by drawing attention to topics like environmental issues and cognitive warfare that are often neglected in conventional strategic foresight efforts.⁵⁹

United States: Various US agencies^c have employed the science fiction-based think tank Useful Fiction for scenario planning. In 2016, the United States Marine Corps Warfighting Laboratory/Futures Directorate commissioned a project involving science fiction authors and military personnel to conceptualise future threat scenarios, and published 'Science Fiction Futures: Marine Corps Security Environment Forecast 2030-2045'.⁶⁰ The project incorporated science-fiction scenarios with on-the-ground information from US intelligence agencies to create real-life wargaming episodes.⁶¹ The US Special Operations Command and United States Air Mobility Command commissioned similar projects in 2023 to "enable identification, communication, and understanding of future trends, and the associated strategy and planning implications."⁶²

b The program includes the Red Team (comprised of science fiction authors and graphic designers), the Blue Team (comprised of military analysts from the French Armed Forces), the Purple Team (comprised of civilian and military experts who can be consulted by the Red Team for crafting scenarios) and the Black Team which includes the Paris Science & Letters University as the supervisor of operations. The Red Team is tasked to create fictional scenarios and draw military foresight from them and, if needed, consult the Purple Team. The scenarios are then handed to the Blue Team for a blind review and analysis. See: <https://www.telegraph.co.uk/news/2019/07/19/french-army-sets-red-team-sci-fi-writers-imagine-future-threats/>.

c Including the Army Futures Command, Army Research Lab, and the Army Special Operations Command.

Based on the interest being afforded to the emerging ‘useful fiction’ genre in policy circles, the following recommendations can help harness the potential of narratives in informing future technological, geopolitical, and socio-economic strategies:

Establish Formal Collaborations between Governments and Science Fiction Communities: Governments should create formal programs that bring together science fiction authors, futurists, technologists, and policymakers. This initiative could model after the UK Ministry of Defence’s “Stories From Tomorrow” or the US Marine Corps’ “Science Fiction Futures.” International alliances, treaties, and partnerships can be leveraged to integrate useful fiction into strategic planning. For example, the Quad’s (Quadrilateral Security Dialogue) security and defence cooperation framework can be utilised to foster collaborative workshops and joint scenario planning exercises focused on technological and geopolitical futures. BRICS partners can be engaged to host a ‘BRICS Science Fiction and Innovation Symposium’ on how emerging technologies could reshape geopolitical dynamics within and beyond BRICS.

Following the discussions on the impact of AI in the 2023 G20 summit hosted in India, the inclusion of a “Futures and Foresight” track can be proposed within the G20 framework. This could include organising G20 Foresight competitions and summits where member nations collaboratively develop and present scenarios addressing global challenges like cybersecurity and climate change. Governments can also be pushed to collaborate with the United Nations Office for Disarmament Affairs (UNODA) to explore the implications of advanced military technologies and autonomous weapons systems through useful fiction.

Utilising Science Fiction for Strategic Planning and Forecasting: Indian government agencies involved in defence, technology policy, and strategic planning should incorporate science fiction narratives into their strategic forecasting and scenario planning processes. For example, the Ministry of Defense (MoD) can lead the integration of science fiction into defence strategy planning; with their focus on the development and regulation of digital infrastructure, the Ministry of Electronics and Information Technology (MeitY) along with think tanks like NITI Aayog can be advised to annually assess the socio-economic impact of emerging technologies; the National Security Council Secretariat (NSCS) can be directed to oversee the strategic forecasting and ensure alignment with national security objectives; and the Defense Research and Development Organisation (DRDO) can help implement science fiction-based scenario planning in defence research and developmental projects.

Experts from these agencies can be called upon to establish a Strategic Foresight Unit (SFU) dedicated to integrating useful fiction into strategic planning. This unit can collaborate with national think tanks like the Institute for Defense Studies and Analyses (IDSA) and international counterparts like the US Defense Advanced Research Projects Agency (DARPA) and the European Defense Agency (EDA) to exchange knowledge and best practices. The scenarios developed by the SFU can then be used to guide research and development priorities in emerging technologies.


Fostering communities of practice: The narrative capability of science fiction is now being harnessed by Western powers like the UK, France, Australia, and the US, where ‘useful fiction’ is being employed in defence and technology sectors. India, with its growing technological infrastructure and strategic needs in the global tech race, can benefit from the establishment of a community of practice comprising thinkers from various disciplines.

The government can also initiate an Annual Science Fiction and Innovation Symposium to bring together stakeholders to plan around converging themes from tech development trends and science fiction narratives. The Indian government can also initiate a ‘FutureScape India’ public competition, especially for students and young professionals, and offer grants and awards to works of science fiction that offer innovative and realisable solutions to pressing national and global problems, encouraging participation from diverse voices across the country. Using this community-based multi-stakeholder approach can help generate strategic foresight and amplify public understanding and engagement with complex technological and strategic issues through accessible and compelling storytelling.

Global collaboration through strategic foresight and science fiction-based competitions: Disruptive technologies like AI, cybersecurity mechanisms and autonomous weapons pose challenges and opportunities that cross national borders. Effective preparation and response thus require a shared understanding and cooperative strategies. International collaboration and the creation of global platforms for strategic foresight will be essential for this purpose. Governments can be pushed to establish competitions like International Foresight Olympiads where teams from different countries propose solutions to potential scenarios derived from science fiction narratives. The competitions can be held in host countries of international summits like G20, BRICS and GPAI (Global Partnership on Artificial Intelligence).

Recommendations

The competitions could include themes like cyber warfare, space colonisation, and global health crises. They can also host simulated cyber-attacks in controlled environments, allowing countries to test their defensive and strategic capabilities. These formats can serve as training grounds for developing international protocols and response strategies for cyber threats. By facilitating international dialogue and collaboration, these initiatives can anticipate, and shape, future technological landscapes. They can also strengthen global responses to emerging threats and ensure that technological advancements are leveraged to benefit the global community.

By leveraging the visionary potential of science fiction, policymakers can navigate the intricate interplay between technology, geopolitics, and societal change, fostering a future that is both innovative and ethically sound. 

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